I claim:

1. A fuel system for a gasoline-powered motor vehicle, said system comprising:

a first sub-tank for storing a first type fuel having a first octane rating;

a second sub- tank for storing a second type fuel having a second octane rating, said second octane rating being lower than said first octane rating;

a fuel mixer having a third type fuel as an output thereof, said third type fuel having a third octane rating which is a function of a mixture ratio of said first type fuel to said second type fuel;

a first supply line configured to deliver fuel from said first fuel tank to said mixer;

a second supply line configure to deliver fuel from said second tank to said mixer;

a controller connected to said mixer for controlling said mixture ratio.

2. The fuel system as claimed in claim 1, wherein a volume of said first sub-tank is smaller than a volume of said second sub-tank.

3. The fuel system as claimed in claim 1, wherein said first sub-tank and said second sub-tank are integrally formed as a single tank, said first sub-tank and said second sub-tank having a common wall separating a volume of said first sub-tank from a volume of said second sub-tank.

4. The fuel system as claimed in claim 3, wherein said wall is a rigid partition.

5. The fuel system as claimed in claim 3, wherein said wall is a flexible diaphragm.

6. The fuel system as claimed in claim 3, wherein said volume of said first sub-tank is smaller than a volume of said second sub-tank.

7. The fuel system as claims in claim 1 further comprising:

a first fill pipe having a first output configured to have access to said first sub-tank, and a first input to enable filling said first sub-tank with said first type fuel; and

a second fill pipe having a second output configured to have access to said second sub-tank, and a second input to enable filling said second sub-tank with said second type fuel.

8. The fuel system as claimed in claim 7, wherein at least a first portion of said first fill pipe is different from at least a second portion of said second fill pipe.

9. The fuel system as claimed in claim 8, wherein said first portion and said second portion are a first cross-section of said first input and a second cross-section of said second input, respectively.

10. The fuel system as claimed in claim 9, wherein said first cross-section and said second cross-section differ in shapes and/or sizes thereof.

11. The fuel system as claimed in claim 1, wherein said mixer is arranged upstream in a fuel flow direction from a fuel injector of said motor.

12. The fuel system as claimed in claim 1, wherein said mixer is an integral feature of a fuel injector of said motor, and said controller is connected to said fuel injector for controlling said mixture ratio at an output of said fuel injector.

13. The fuel system as claimed in claim 1, wherein said controller is configured to control said mixture ratio at least as a function of a compression ratio and/or a combustion chamber pressure of said motor.

14. A method of manufacturing a dual fuel system for a gasoline-powered motor vehicle, said system comprising:

forming a first sub-tank for storing a first type fuel having a first octane rating;

forming a second sub-tank for storing a second type fuel having a second octane rating, said second octane rating being lower than said first octane rating;

connecting said first sub-tank and said second sub-tank to a fuel mixer having a third type fuel as an output thereof, said third type fuel having a third octane rating which is a function of a mixture ratio of said first type fuel to said second type fuel; and

connecting a controller to said mixer for controlling said mixture ratio.

15. The method as claimed in claim 14, wherein a volume of said first sub-tank is smaller than a volume of said second sub-tank.

16. The method as claimed in claim 14, wherein said first sub-tank and said second sub-tank are integrally formed as a single tank, said method further comprising forming a wall in said single tank separating a volume of said first sub-tank from a volume of said second sub-tank.

17. The method as claimed in claim 16, wherein said wall is a rigid partition.

18. The method as claimed in claim 16, wherein said wall is a flexible diaphragm.

19. The method as claimed in claim 16, wherein said volume of said first sub-tank is smaller than a volume of said second sub-tank.

20. The method as claims in claim 14 further comprising:

connecting a first output of a first fill pipe to said first sub-tank;

configuring a first input of said first fill pipe to enable filling said first sub-tank with said first type fuel;

connecting a second output of a second fill pipe to said second sub-tank; and

configuring a second input of said second fill pipe to enable filling said second sub-tank with said second type fuel.

21. The method as claimed in claim 20, wherein at least a first portion of said first fill pipe is different from at least a second portion of said second fill pipe.

22. The method as claimed in claim 21, wherein said first portion and said second portion are a first cross-section of said first input and a second cross-section of said second input, respectively.

23. The method as claimed in claim 22, wherein said first cross-section and said second cross-section differ in shapes and/or sizes thereof.

24. The method as claimed in claim 14, further comprising arranging said mixer upstream in a fuel flow direction from a fuel injector of said motor.

25. The method as claimed in claim 14, further comprising integrally configuring said mixer with a fuel injector of said motor, wherein said controller is connected to said fuel injector for controlling said mixture ratio at an output of said fuel injector.

26. The method as claimed in claim 14, further comprising configuring said controller to control said mixture ratio at least as a function of a compression ratio and/or a combustion chamber pressure of said motor.

27. A method for operating a gasoline-powered motor vehicle, said method comprising:

filling a first sub-tank of said vehicle with a first type fuel having a first octane rating from a first source external to said vehicle;

filling a second sub-tank of said vehicle with a second type fuel having a second octane rating, said second octane rating being lower than said first octane rating, from a second source external to said vehicle;

storing said first type fuel in a first sub-tank;

storing said second type fuel in a second sub-tank;

delivering to a fuel mixer said first type fuel stored in said first sub-tank and said second type fuel stored in said second sub-tank;

outputting a third type fuel from said mixer, said third type fuel having a third octane rating which is a function of a mixture ratio of said first fuel type to said second fuel type; and

controlling said mixture ratio as required by operating conditions of said vehicle.

28. The method as claimed in claim 27, wherein a volume of said first type fuel filling said first sub-tank is smaller that a volume of said second type fuel filling said second sub-tank.

29. The method as claimed in claim 27, wherein said fuel mixer is positioned upstream in a fuel flow direction from a fuel injector of said motor.

30. The method as claimed in claim 27, wherein said fuel mixer is integrally configuring with a fuel injector of said motor and said controller is connected to said fuel injector, said method comprising controlling said mixture ratio at an output of said fuel injector.

31. The fuel system as claimed in claim 27, wherein said controlling comprises controlling said mixture ratio at least as a function of a compression ratio and/or a combustion chamber pressure of said motor.

32. The method as claims in claim 27, wherein:

a first fill pipe is connected to said first sub-tank, said first fill pipe comprising a first output connected to said first sub-tank and a first input to enable filling said first sub-tank with said first type fuel;

a second fill pipe is connected to said second sub-tank, said second fill pipe comprising a second output connected to said second sub-tank and a second input to enable filling said second sub-tank with said first type fuel;

said filling said first sub-tank comprising removably connecting a first output of said first source to said first input of said first fill pipe;

said filling said second sub-tank comprising removably connecting a second output of said first source to said second input of said second fill pipe;

said first output of said first source being uniquely configured to fit said first input of said first fill pipe; and

said second output of said second source being uniquely configured to fit said second input of said second fill pipe.